Renyu (Philip) Zhang

CONTACT INFORMATION	New York University Shanghai 1555 Century Avenue Pudong, Shanghai, China, 200122	renyu.zhang@nyu.edu https://rphilipzhang.github.io/rphilipzhang/

EDUCATION

Washington University in St. Louis, Olin Business School — St. Louis, MO

Ph.D. Operations Management — 05/2016

- Thesis: **Dynamic Pricing and Inventory Management: Theory and Applications**
- Advisors: Nan Yang, Fuqiang Zhang

Peking University, School of Mathematical Sciences — Beijing, China

B.S. Mathematics — 07/2011

ACADEMIC POSITION

New York University Shanghai — Shanghai, China

Assistant Professor of Operations Management — 09/2016-

NYU Global Network Assistant Professor — 07/2017-

New York University, Stern School of Business — New York, NY

Visiting Assistant Professor of Operations Management — 06/2017-

NON-ACADEMIC POSITION

Kwai — Beijing, China

Economist & Tech Lead — 12/2018-

RESEARCH INTERESTS

Methodologies
Reinforcement learning; optimization; game theory; matching; mechanism design; econometrics.

Applications
Online platforms and marketplaces; sharing economy; social networks; sustainable operations; supply chain management; revenue management; dynamic pricing and inventory management.

PUBLICATIONS

1. **Dynamic Pricing and Inventory Management under Inventory-Dependent Demand**, *Operations Research*, **62**(5), 2014, 1077-1094 (with Nan Yang).

2. **Dynamic Pricing and Inventory Management under Fluctuating Procurement Costs**, *Manufacturing & Service Operations Management*, **17**(3), 2015, 321-334 (with Guang Xiao and Nan Yang).

3. **Dynamic Supply Risk Management with Signal-Based Forecast Multi-Sourcing, and Discretionary Selling**, *Production and Operations Management*, **26**(7), 2017, 1399-1415 (with Long Gao, Nan Yang, and Ting Luo).

4. **Trade-in Remanufacturing, Customer Purchasing Behavior, and Government Policy** *Manufacturing & Service Operations Management*, **20**(4), 2018, 601-616 (with Fuqiang Zhang).
   - Finalist award in the *POMS College of Supply Chain Management 2015 Best Student Paper Competition*

PAPERS UNDER REVIEW

5. **Competition and Coopetition for Two-sided Platforms** (with Maxime Cohen).
   - Honorable Mention in the *INFORMS Service Science Best Cluster Paper Award*

6. **Data Aggregation and Demand Prediction** (with Maxime Cohen and Kevin Jiao).
   - Finalist in the *INFORMS Data Mining Section Best Paper Award*

7. **Personalized Sales Targets with Customer Choices** (with Xiaolong Li, Ying Rong, and Huan Zheng).

8. **Dynamic Pricing and Inventory Management in the Presence of Online Reviews** (with Nan Yang).

9. **Dynamic Competition under Market Size Dynamics: Balancing the Exploitation-Induction Tradeoff** (with Nan Yang).

10. **Competition on Inventory Availability and Price** (with Junfei Lei, Yugang Yu, and Fuqiang Zhang).

11. **Social Nudges Boost Productivity on Online Platforms: Evidence from Field Experiments** (with Zhiyu Zeng, Hengchen Dai, Dennis Zhang, Max Shen, Zhiwei Xu, and Heng Zhang).

12. **Comparative Statics Analysis of Inventory Management Models with Dynamic Pricing** (with Nan Yang).

WORKS IN PROGRESS

13. **Cold Start on Online Advertising Platforms: Data-Driven Algorithms and Field Experiments** (with Zikun Ye, Xin Chen, Dennis Zhang, and Heng Zhang).

14. **Carpool Services for Ride-sharing Platforms** (with Xuan Wang).

15. **Recommender Systems on Platforms** (with Xuan Wang and Dennis J. Zhang).

INVITED SEMINARS

Shanghai Jiaotong University, Antai College of Economics and Management	09/2020
New York University, Stern School of Business	09/2020
Club Bear Online Seminar, Video link	07/2020
University of Illinois at Chicago, College of Business Administration	10/2019
Peking University, Guanghua School of Management	12/2018
Sun Yat-sen University, Lingnan College	12/2018
John Hopkins University, Carey Business School	11/2018
New York University, Stern School of Business	11/2018
Chinese University of Hong Kong, CUHK Business School	01/2018
Sichuan University, School of Business	12/2017
Washington University in St. Louis, Olin Business School	10/2017
Hong Kong Polytechnique University, Faculty of Business	08/2017
City University of Hong Kong, College of Business	08/2017
Hong Kong University of Science and Technology, HKUST Business School	08/2017
New York University, Stern School of Business	06/2017
Singapore Management University, Lee Kong Chian School of Business	04/2017
National University of Singapore, NUS Business School	04/2017
University of Science and Technology of China, School of Management	03/2017
Southeast University, School of Economics and Management	12/2016
Tsinghua University, School of Economics and Management	12/2016
Shanghai Jiaotong University, Antai School of Economics and Management	12/2016
University of Toronto, Rotman School of Management	11/2016
Nanjing University, School of Management and Engineering	09/2016
Southwest University of Finance and Economics, School of Business Administration	07/2016
Southwest Jiaotong University, School of Economics and Management	07/2016

Shanghai University of Finance and Economics, School of Business Administration	02/2016
New York University Shanghai	02/2016
University of Texas at Dallas, Jindal School of Management	01/2016
New York University, Stern School of Business	01/2016
Chinese University of Hong Kong, SEEM Department	01/2016
Hong Kong University of Science and Technology, HKUST Business School	01/2016
Hong Kong University of Science and Technology, IELM Department	01/2016
Hong Kong Polytechnique University, Faculty of Business	01/2016
City University of Hong Kong, College of Business	01/2016

CONFERENCE TALKS

INFORMS Annual Meeting 2020	11/2020
INFORMS Annual Meeting 2019	10/2019
Data-Driven and Innovative Operations Workshop,	06/2019
POMS-HK Conference 2019	01/2019
Young Scholars' Forum on Management Science 2019	01/2019
INFORMS Annual Meeting 2018	11/2018
Operations Management under "Internet+" Environment	08/2018
MSOM Conference 2018	07/2018
Revenue Management and Pricing Annual Conference 2018	06/2018
Revenue Management Workshop	05/2018
POMS Conference 2018	05/2018
POMS-HK Conference 2018	01/2018
Young Scholars' Forum on Management Science 2017	12/2017
INFORMS Annual Meeting 2017	10/2017
MSOM Conference 2017	06/2017
POMS-HK Conference 2017	01/2017
INFORMS Annual Meeting 2016	11/2016
CSAMSE Annual Conference 2016	07/2016
Revenue Management and Pricing Annual Conference 2016	06/2016
POMS Annual Meeting 2016	05/2016
Decision Science Institute Annual Conference 2015	11/2015
INFORMS Annual Meeting 2015	11/2015
MSOM Annual Conference 2015	06/2015
POMS Annual Meeting 2015	05/2015
INFORMS Annual Meeting 2014	11/2014
MSOM Annual Conference 2014	06/2014
INFORMS Annual Meeting 2013	10/2013
INFORMS Annual Meeting 2012	10/2012

HONORS, AWARDS, AND GRANTS

1. Finalist, *INFORMS Data Mining Section Best Paper Award.* 10/2019
2. MSOM Meritorious Service Award 2018, 2019 04/2020
3. Shanghai Young Eastern Scholar Program, PI, RMB 200,000/Year. 01/2019
4. National Science Foundation of China, Young Scientist Program 71802133, PI, RMB 180,000. 01/2019-12/2021
5. Honorable Mention, *INFORMS Service Science Best Cluster Paper Award.* 10/2017

6. Shanghai Pujiang Talent Program 17PJC074, PI, RMB 100,000.   09/2017-08/2019

7. Finalist Award, *POMS College of Supply Chain Management Best Student Paper Competition.* 05/2015

8. First Prize Award, Chinese Mathematics Olympiad   10/2006

TEACHING
EXPERIENCES

New York University Shanghai

Instructor

• Business Analytics	Spring 2021
• Machine Learning for Business	Fall 2020
• Business Analytics (Rating: 4.2/5, 4.8/5)	Spring 2019
• Operations Management (Rating: 4.6/5)	Spring 2019
• Business Analytics (Rating: 4.4/5, 4.7/5)	Spring 2018
• Competitive Advantage from Operations (Rating: 3.8/5)	Fall 2017
• Competitive Advantage from Operations (Rating: 4/5)	Spring 2017
• Competitive Advantage from Operations (Rating: 4.6/5)	Fall 2016

Business Honors Thesis Advisor
- Yiyi Zhang (2018), Yujia Ni (2018).

Kwai

Internal Instructor

• Data Driven Optimization	05, 2020
• Operations Analytics	01-05, 2019

Washington University in St. Louis, Olin Business School

Teaching Assistant
- Operations Management; Advanced Operations Strategy; Market Competition and Value Appropriation ; Operations Planning and Control.

PROFESSIONAL
SERVICES

Journal Referee
Management Science, Operations Research, Manufacturing & Service Operations Management, Marketing Science, Production and Operations Management, Transportation Research: Part B, Naval Research Logistics, European Journal of Operations Research, Omega, Journal of Management Science and Engineering, Applied Mathematical Modeling, Operational Research: An International Journal.

Competition Judge
MSOM Student Paper Competition (2017, 2018, 2019).

Conference Committee and Session Chair
Session Chair:
- INFORMS 2018, POMS 2018, POMS-HK Conference 2018, POMS-HK Conference 2017, CSAMSE Conference 2016.

Sponsorships and Exhibits Committee member:
- POMS Annual Meeting 2016.

Professional Organization Membership
INFORMS, MSOM, RMP, APS, POMS.

Internal Services

NYU Shanghai Candidate Weekend instructor.	03/2018
NYU Shanghai Business Honors program thesis advisor.	09/2017-
NYU Shanghai Operations Management Reading Group co-organizer.	03/2017-
NYU Shanghai Housing Subcommittee member.	11/2016-05/2019
NYU Shanghai Business Research Seminar coordinator.	09/2016-08/2017
NYU Shanghai Business Honors Program guest lecturer.	10/2016-
Olin Busines School Operations Management PhD Seminar coordinator.	01/2013-12/2013

CONSULTING
EXPERIENCES

Cardinal Operations

Parttime Scientist   09/2017-08/2018